

Year 11 Timber and Furnishings – 2019

I decided to have an option of two projects in 2019. The photos below shows the two projects which students started and with two classes of 24, I knew all 48 would not last. As it stands I have 14 left in 2020. The majority of students who left the class also left school.

The idea with both projects was if a student left school I wasn't throwing away \$100 worth of materials, a half completed bedside table. The bedside table cost \$100 to make. Most students completed the jewellery box prior to leaving. For those who completed the jewellery box, they moved onto the small pedestal table if they still remained at school.



I have included how to construct both the jewellery box and the small pedestal table in the form of job sheets and steps in construction, however the bedside table I will deal with a little differently.



The idea with the bedside table is that I use the Universal router guide to machine up all the framing joints. The 70 x 70 legs are mounted in the guide and grooves are machined at the top 190mm long and 15mm deep and another groove is machined 60mm from the bottom 40mm long and also a depth of 15mm see photo. The photo shows all four legs machined with grooves and students can do this in a period. The legs can be turned on the lathe prior to machining grooves or after.

If your school doesn't have a universal router guide then dominos, mortise and Tenon's or some other framing joint could be used. The advantage of using the guide is its accuracy, safety and students are motivated due to its quickness.

The inside front legs at the top are machined differently for the draw.

Two students start on the lathe as I only have two long bed lathes and two on the guide. A few other students can start cutting the four legs to 700mm and preparing them for between centre turning.

A few more students can start cutting the top rails to 355mm they are 190 x 19. The side rails are taken into the laser cutter, therefore a few more students are scattered on more technology.

More students can start on the top, laminating 7 pieces of 70 x 35 x 500 which make up the top. Glue them in sash cramps, thickness sand and do inlay in the top. For the inlay set up a fence all the way around the edge of the table and rout a 12mm groove 5mm deep, use a contrasting timber fill the groove with mitre each corner.

Other students could start on the bottom rails. These are 40 x 19 x 335 and 4 are required. The rails are placed in the universal router guide and a 19mm groove is machined there entire length. The particle board base will clip into these grooves later. The photo shows how professional the shelf fits into the rails and legs.

The rails can be routed with a half round cutter on all edges or the leg can be square up with a chisel or mortising machine.

Again if you haven't a universal router guide the teacher will have to cut the groove on the inverted router table or some other way?

If all framing joints are cut to 15mm deep and all rails are cut to 355mm long the table will be square when assembled.



In summary your whole class is scattered across the entire workshop at the start of the project. The secret to classroom management is to keep the students busy and motivated. As a student finishes on the lathe or the laser cutter another starts the new process and the students help each other.

At this point it should be noted that when I did this project two years ago I had an entire class built the project to the standard in the photo. I have never had an entire class take a completed project home. The idea with the joining technique and using the guide is its accuracy and simplicity motivating students to assemble quickly so more skill like dovetails in drawers, inlays, laser cutters and quality finishes can be applied.

When the table is assembled dry, without glue, a measurement can be taken for the shelf which is made from a piece of 19mm particle board with a pine face veneer.

When the bottom rails fit into the 40mm grooves a little piece of timber needs to be removed so the particle board fits. This is done on the drop saw by taking a series of cuts on the drop saw to a width of 19mm. This will make more sense when you put a rail into the groove.

I fix the top with plugs and screws, draw rails are made and then the draw is constructed. I use dovetails and housings in the draw and the front of the draw is put on a faceplate. The front of the draw spins like a fan and a handle is cut. I explain to students that making a handle is better than buying one in regards to the HSC = more marks.

My band 6 type student will turn all four legs, the intermediate students will only turn the front legs and some kids don't turn at all.

I have marked the practical HSC for a while now and this project with a good folio would come in at about 30 out of 40 at a guess. We don't expect too much more in year 12 therefore this project really prepares them for the road ahead.

Some teachers will be intimidated by doing two different projects and others who are more experienced will have no trouble. The trick is always preparation, I walk into other teacher's woodwork classes at my school when doing an extra, and the way they do things is totally different to me and I am like a fish out of water. It's not that they are doing it wrong I haven't done the preparation for their projects.